



Knight Foundation
School of Computing
and Information Sciences

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Fall 2023 Capstone II Project

NuMom (Keeping Moms & Infants Healthy)

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Mentor: Jean Hannan, Product Owner & Eduardo Morales, Lead Developer

Instructor/Faculty: Dr. Masoud Sadjadi, Florida International University



PROBLEM

Healthcare is a crucial service for every person. Many low-income individuals lack access to proper healthcare services. This especially impacts new low-income mothers who do not have continuous affordable access to the necessary resources to guide them through the journey of maternity. NuMom is a free app designed to provide these low-income mothers with a variety of resources and information about prenatal and postnatal care.

CURRENT SYSTEM

The current version of NuMom supports the following features:

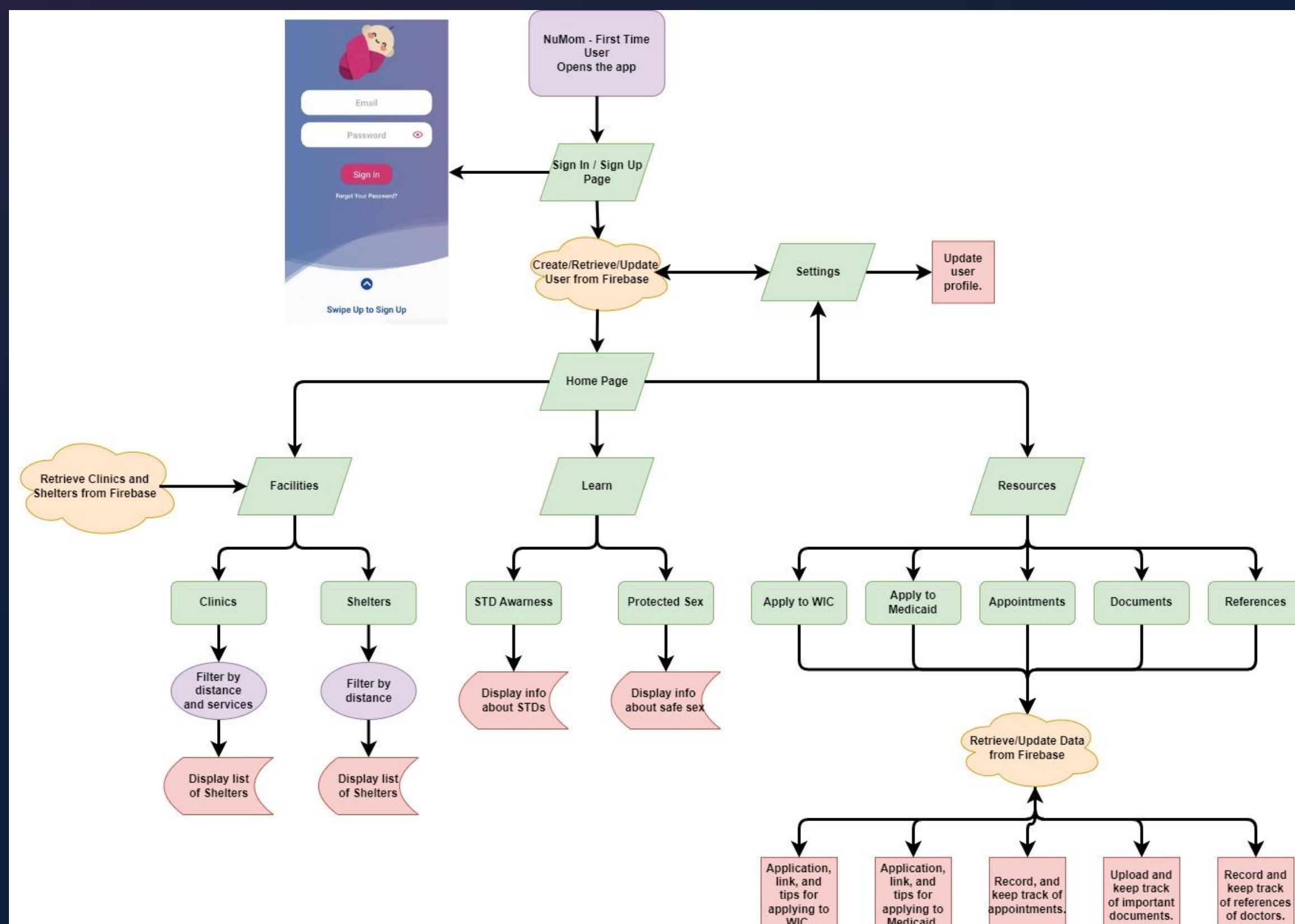
- Supports three languages: English, Spanish, and Creole.
- Allows the user to Sign Up/Sign in and customize their profile.
- Displays a map showing the location of various clinics and shelters.
- Displays the various information regarding specific clinics and shelters (e.g. address, times, etc.)
- Provides a variety of helpful information such as STD Awareness and safe sex practices.
- Provides a variety of healthcare resources such as assistance in applying to WIC and Medicaid.
- Allows the user to upload documents, record appointments, and save immunizations and references.

REQUIREMENTS

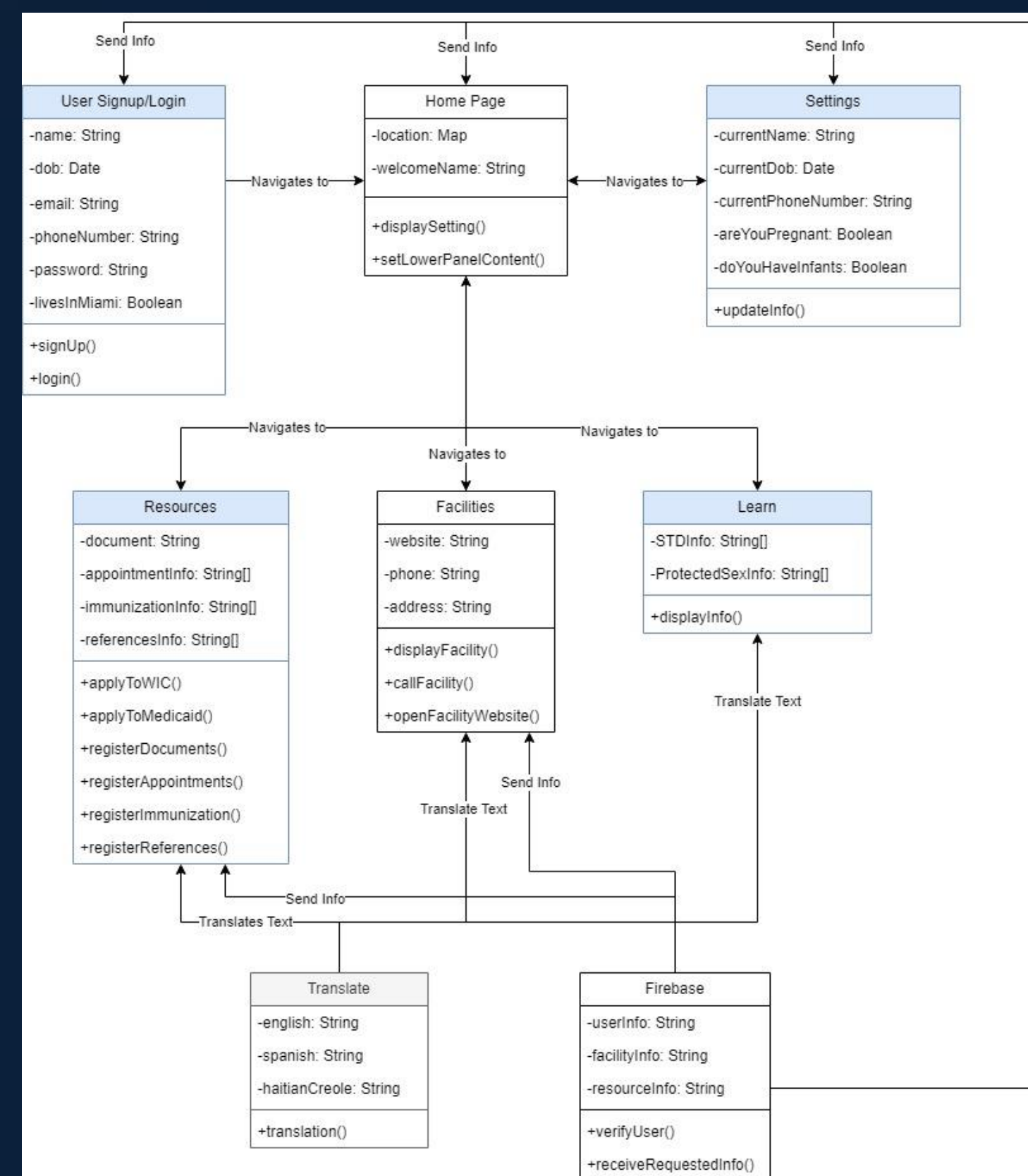
Our main task this semester was to focus on the frontend aspect of the application and fix any existing bugs and improve the UI experience of the user. The main contributions I have made were:

- Fixed visual inconsistencies in Android version.
- Removed unused imports from most of the components.
- Added Spanish and Creole translations for the Medicaid Screen and its checklist.
- Fixed Regex expression to validate infant date of birth.
- Added translations on Firebase for the shelters' descriptions.

SYSTEM DESIGN



OBJECT DESIGN



IMPLEMENTATION



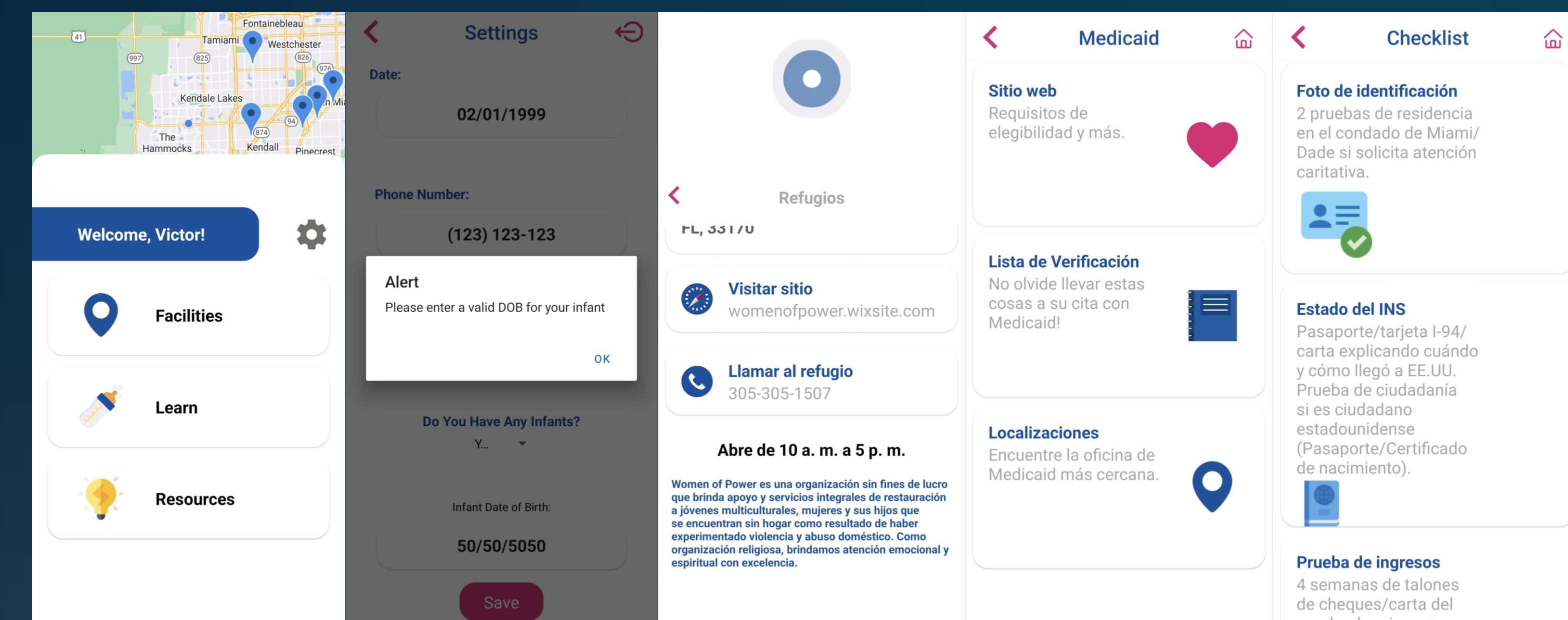
VERIFICATION

Our code repository is hosted on GitHub. In order to make changes to the code, we would create our own branches, publish them to the GitHub repository and then initialize a pull request to merge the new branches with the main development branch. The pull requests would require the other two team members to review the code changes and verify that everything worked correctly before approving. We would then locally test the branches to verify that all the features worked correctly, then approve the pull request, and finally merge into the development branch,

SUMMARY

The main purpose of our development sprints were to enhance the frontend user experience and prepare the app for a new TestFlight release. As a team, we improved various aspects of the application. The map was fixed to allow for faster loading of clinics and shelters. Various UI inconsistencies were tweaked. New modern icons were added to improve the UI of the application. Translations were added to both Firebase and Medicaid screens to allow for a better user experience. Overall, we are very satisfied with the progress NuMom has made this semester.

REFERENCES



Engineering
& Computing

ACKNOWLEDGEMENT

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